Issuance Date: December 24, 2003
Effective Date: February 1, 2004
Expiration Date: February 1, 2009

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

WASTE DISCHARGE PERMIT No. WA-**000062-1**

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Kimberly-Clark Worldwide, Inc.
2600 Federal Avenue
Everett, Washington 98201

Facility Location:	Waterbody's Name:
Everett, Washington	Everett Harbor and Port Gardner Bay in Possession Sound
Industry Type:	Water Body I.D. No.: 03-07-09
Sulfite pulp and paper mill	

	Outfall 001	Outfall 003	Outfall 008	Outfall 100
Latitude:	47° 58' 18" N	47° 59' 03" N	47° 59' 18" N	47° 59' 14" N
Longitude:	122° 14' 20" W	122° 13' 08" W	122° 13' 06" W	122° 14' 48" W

is authorized to discharge in accordance with the special and general conditions which follow.

Carol Kraege, P.E.
Industrial Section Manager
Washington State Department of Ecology

TABLE OF CONTENTS

SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report	Monthly	1st month after effective date
S3.E	Noncompliance Notification	As necessary	
S4.A	Treatment System Operating Plan		180 days after effective date of permit
S4.B	Reporting Bypasses	As necessary	
S5.C	Solid Waste Control Plan	1/permit cycle	180 days after effective date of permit
S5.C	Modification to Solid Waste Plan	As necessary	
S7.	Spill Plan	1/permit cycle, updates submitted as necessary	180 days after effective date of permit
S8.A	Acute Toxicity Characterization Data	Every other month for one year	Within 180 days of new outfall startup/60 days after each subsequent sampling event
S8.A	Acute Toxicity Tests Characterization Summary Report	1/permit cycle	90 days following the last characterization sampling event
S8.C	Acute Toxicity Compliance Monitoring Reports	If necessary	60 days after each subsequent sampling event
S8.D	Acute Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	
S8.D	Acute Toxicity TI/TRE Plan	As necessary	
S8.E	Acute Toxicity Effluent Characterization with Permit Renewal Application	2/permit cycle	Once in the Last Summer & Once in the Last Winter Prior to Submission of the Renewal Application

Permit Section	Submittal	Frequency	First Submittal Date
S9.A	Chronic Toxicity Characterization Data	Quarterly for one year	Within 180 days of new outfall startup /60 days after each subsequent sampling event
S9.A	Chronic Toxicity Tests Characterization Summary Report	1/permit cycle	90 days following the last characterization sampling event
S9.C	Chronic Toxicity Compliance Monitoring Reports	If necessary	60 days after each subsequent sampling event
S9.D	Chronic Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	
S9.D	Chronic Toxicity TI/TRE Plan	As necessary	
S9.E	Chronic Toxicity Effluent Characterization with Permit Renewal Application	2/permit cycle	Once in the Last Summer & Once in the Last Winter Prior to Submission of the Renewal Application
S10.	Sediment Sampling and Analysis	1/permit cycle	
S11.	Total chlorine free study	1/permit term	36 months after effective date of permit
S12.	Best Management Practices Plan	As necessary	
S13.	Effluent Mixing Study	1/permit cycle	Within 180 days of outfall 100 startup
S14.	Priority Pollutant Scan	Annually	Within 12 months of Permit issuance Date
G7.	Application for Permit Renewal	1/permit cycle	180 days before permit expiration

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

A. Process Wastewater Discharges

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Beginning on the effective date of this permit and lasting through the completed construction and

operation of outfall 100, the Permittee is authorized to discharge treated process wastewater, storm water, and non-contact cooling water from outfalls 001, 003, and 008 at the permitted locations. After outfall 100 is functioning the Permittee is authorized to discharge treated wastewater, storm water, and non-contact cooling from outfall 100 and via outfalls 001, 003 and 008 in emergency and shutdowns to the expiration date of the permit. These discharges are subject to the following limitations:

	EFFLUENT LIMITATIONS: Sum total of OUTFALLS 001, 003 and 008, then OUTFALL 100	
Parameter	**Average Monthly[a]**	**Maximum Daily[b]**
pH[c,d]		5.0 - 9.0 SU
Biochemical oxygen demand (BOD_5)	16,600 Lbs./day	31,700 Lbs./day
Total suspended solids (TSS)	23,900 Lbs./day	44,800 Lbs./day
AOX[e]	1,500 Lbs./day	2,500 Lbs./day

[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

[c] Indicates the range of permitted values. When pH is continuously monitored, excursions between 4.0 and 5.0, or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 26 minutes per month. Any excursions below 4.0 and above 10.0 for more then ten (10) minutes are violations. The instantaneous maximum and minimum pH shall be reported monthly.

[d] The pH limit and the exception in c above apply to outfalls 001, 003 and 008 until outfall 100 is operational and thereafter to outfall 100 and 003 and 008 during emergency bypass.

[e] The AOX limit only applies to outfall 100. The permittee may use a seven day averaging period for the final effluent flow when calculating the weekly mass of AOX.

B. Bleach Plant Effluent Compliance Parameters:

Compounds	Method	Limit
2,3,7,8-TCDD[1]	1613	< 10 pg/L
2,3,7,8-TCDF[1,2]	1613	< 10 pg/L

Compounds	Method	Limit
Trichlorosyringol	1653	< 2.5 µg/L
3,4,5-Trichlorocatechol	1653	< 5.0 µg/L
3,4,6-Trichlorocatechol	1653	< 5.0 µg/L
3,4,5-Trichloroguaiacol	1653	< 2.5 µg/L
3,4,6-Trichloroguaiacol	1653	< 2.5 µg/L
4,5,6-Trichloroguaiacol	1653	< 2.5 µg/L
2,4,5-Trichlorophenol	1653	< 2.5 µg/L
2,4,6-Trichlorophenol	1653	< 2.5 µg/L
Tetrachlorocatechol	1653	< 5.0 µg/L
Tetrachloroguaiacol	1653	< 5.0 µg/L
2,3,4,6-Tetrachlorophenol	1653	< 2.5 µg/L
Pentachlorophenol	1653	< 5.0 µg/L

[1] TCDD is defined as 2,3,7,8-tetrachlorodibenzo-p-dioxin and TCDF is defined as 2,3,7,8-tetrachlorodibenzofuran. The above listed concentration represents the minimum level (as defined in 40 CFR 430.01(i)) for this pollutant. Analysis including sample containers and QA/QC shall be conducted in accordance with Method 1613: Tetra-through Octa- Chlorinated dioxins and Furans by Isotopic Dilution HRGC/HRMS, USEPA Office of Water, Engineering and Analysis Division, Revision A of an approved equivalent.

[2] Consistent with 40 CFR 122.45(g), the permittee is allowed to net out (subtract) the 2,3,7,8-TCDF concentration in the fresh water intake from the 2,3,7,8-TCDF concentration at the bleach plant effluent within forty two months after the effective date of permit.

C. Mixing Zone Descriptions

The size and dilution factor are given for outfalls 001, 003, and 008. The dimension and dilution factor for the new outfall (100) will be determined under Special condition S13 below.

	Acute mixing zone		Chronic mixing zone	
Outfall #	Distance from diffuser	Dilution Factor	Distance from diffuser	Dilution Factor
001	62 feet	35:1	620 ft	889:1
003	32.4 ft	10:1	324 ft	19:1
008	32.4 ft	10:1	324 ft	35:1
100	65 ft	To be determined	650 ft	To be determined

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Final KC Wastewater Effluent	Flow	MGD	Final KC effluent from all active outfalls	Continuous[1]	24 hr integrated
"	BOD_5	mg/l	"	Daily	24 hr composite
"	TSS	mg/l	"	Daily	"
"	pH	Standard Units	"	Continuous	Instantaneous
"	Temperature	Degree Fahrenheit	"	Continuous	Instantaneous
"	2,3,7,8-TCDD	pg/L - ppq	"	Yearly	24 hr composite
"	2,3,7,8-TCDF	pg/L - ppq	"	Yearly	"
"	AOX	mg/l	"	Weekly	"
"	Chemical oxygen demand (COD)	mg/l	"	Weekly	24 hr composite
Paper machine room	Production[2]	Tons/day	Off the machine	Continuous	24 hr integrated
Bleach plant effluent	2,3,7,8-TCDD	pg/L - ppq	Final Bleach plant effluent	Monthly	24 hr composite
"	2,3,7,8-TCDF	pg/L - ppq	"	Monthly	"
"	Trichlorosyringol	µg/l	"	Monthly	"
	4,5,6-Trichloroguaiacol	µg/l	"	Monthly	"

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
"	3,4,5-Trichlorocatechol	µg/l	"	Monthly	"
"	3,4,6-Trichlorocatechol	µg/l	"	Monthly	"
"	3,4,5-Trichloroguaiacol	µg/l	"	Monthly	"
"	3,4,6-Trichloroguaiacol	µg/l	"	Monthly	"
	4,5,6-Trichloroguaiacol	µg/l	"	Monthly	"
"	2,4,5-Trichlorophenol	µg/l	"	Monthly	"
"	2,4,6-Trichlorophenol	µg/l	"	Monthly	"
"	Tetrachlorocatechol	µg/l	"	Monthly	"
	Tetrachloroguaiacol	µg/l	"	Monthly	"
"	Pentachlorophenol	µg/l	"	Monthly	"
"	2,3,4,6-Tetrachlorophenol	µg/l	"	Monthly	"
"	Chloroform	mg/l	"	Monthly	24 hr composite[3]
Secondary sludge[4]	2,3,7,8-TCDD	µg/L - ppt	Waste sludge line	Yearly	Grab
Raw water[5]	2,3,7,8-TCDF	pg/L - ppq	Raw water intake line	Quarterly	24 hr composite

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
WET Testing					
New Outfall 100	Characterization Study	Acute Toxicity	Effluent	Every other month for one year	24 hour composite
New Outfall 100	Limit if required by the Characterization Study	Acute Toxicity	Effluent	Quarterly on a rotation basis	24 hour composite
New Outfall 100	Characterization Study	Chronic Toxicity	Effluent	Quarterly for one year	24 hour composite
New Outfall 100	Limit if required by the Characterization Study	Chronic Toxicity	Effluent	Quarterly on a rotation basis	24 hour composite
New Outfall 100	Fecal coliform	#/100 ml	Effluent	Monthly	Grab
Use of outfall 003 & 008	Record of use[6]	Date and total time	Discharge	Monthly	Records

[1] Continuous means uninterrupted - except for brief lengths of time for calibration, power failure, or for unanticipated equipment repair or maintenance. Samples shall be taken every 6 hours and composited when continuous monitoring is not possible.

[2] The average and the daily maximum tons/day of sulfite pulp produced and the tons/day purchased pulp consumed for non-integrated tissue shall be reported on the monthly discharge monitoring report.

[3] The 24 hour composite samples for chloroform shall be taken every 6 hours and quantitatively composited in the laboratory. The Permittee shall include a detailed description of the method used to composite the sample with the first report, and with subsequent reports if the compositing method has been modified. If an automated continuous or grab compositing device is used, the report shall include a description of the system and the name of the manufacturer.

[4] Sludge is defined as secondary treatment activated solids. Analysis of sludge samples and QA/QC, shall be conducted in accordance with Method 1613: Tetra-through Octa- Chlorinated dioxins and Furans by Isotopic Dilution HRGC/HRMS, USEPA Office of Water, Engineering and Analysis Division, Revision A of an approved equivalent.

[5] The Permittee must report both the concentrations of the 2,3,7,8-TCDF in the fresh water intake and the bleach plant effluent.

[6] The time that Outfall 100 is bypassed and outfall 003 and/or 008 is used must be recorded to the nearest 0.1 of a hour and reported on the DMR.

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

D. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. The Department exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report

(DMR) form provided, or otherwise approved, by the Department. DMR forms shall be submitted no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. The report(s) shall be sent to the Department of Ecology, Solid Waste and Financial Assistant, Industrial Section, PO Box 47706, Olympia, Washington 98504-7706.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected.

The Permittee shall report all emergency use of outfalls 003 and 008 on the monthly DMR.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2. of this permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and clean up unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to the Department within thirty (30) days after becoming aware of the violation.

2. Immediately notify the Department of the failure to comply.

3. Submit a detailed written report to the Department within thirty (30) days (five [5] days for upsets and bypasses), unless requested earlier by the Department. The report shall contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

S4. OPERATION AND MAINTENANCE

The Permittee shall, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Treatment System Operating Plan

An updated Treatment System Operating Plan (TSOP) shall be submitted to the Department within 180 day after the effective date of the permit. The TSOP shall include the following information:

1. A baseline operating condition, which describes the operating parameters and procedures, used to meet the effluent limitations of S1 at the production levels used in developing these limitations.

2. In the event of production rates below the baseline levels used to establish these limitations, the plan shall describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting shall be described in the plan.

3. In the event of an upset, due to plant maintenance activities, severe stormwater events, startups or shutdowns, or other causes, the plan shall describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting shall be described in the plan.

4. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring, treating and/or controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

The plan shall be updated and submitted, as necessary, to include requirements for any major modifications of the treatment system.

B. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and the Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

   Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

   This bypass is permitted only if:

   a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

c. The Department is properly notified of the bypass as required in condition S3E of this permit.

3. Bypass which is anticipated and has the Potential to Result in Noncompliance of this Permit.

The Permittee shall notify the Department at least thirty (30) days before the planned date of bypass. The notice shall contain (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type bypass:

a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.

b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

S5. SOLID WASTE DISPOSAL

A. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

C. Solid Waste Control Plan

The Permittee shall submit all proposed revisions or modifications to the solid waste control plan to the Department. The Permittee shall comply with any plan modifications. The Permittee shall submit an update of the solid waste control plan within 180 days of the effective date of the permit.

S6. NON-ROUTINE AND UNANTICIPATED DISCHARGES

A. Beginning on the effective date of this permit, the Permittee may discharge non-routine wastewater on a case-by-case basis if approved by the Department. Prior to any such discharge, the Permittee shall contact the Department and at a minimum provide the following information:

1. The nature of the activity that is generating the discharge.

2. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.

3. The total volume of water expected to be discharged.

4. The results of the chemical analysis of the water. The water shall be analyzed for all constituents limited for the Permittee's discharge. The analysis shall also include hardness, any metals that are limited by water quality standards, and any other parameter deemed necessary by the Department. All discharges must comply with the effluent limitations as established in Condition S1 of this permit, water quality standards, sediment management standards, and any other limitations imposed by the Department.

5. The date of proposed discharge and the rate at which the water will be discharged, in gallons per minute. The discharge rate shall be limited to that which will not cause erosion of ditches or structural damage to culverts and their entrances or exits.

6. If the proposed discharge is to a municipal storm drain and is approved by the Department, the Permittee shall notify the municipality of the discharge.

B. The discharge cannot proceed until the Department has reviewed the information provided and has authorized the discharge. Authorization from the Department will be by letter to the Permittee or by an Administrative Order.

S7. SPILL PLAN

The Permittee shall within 180 days of the effective date of the permit, submit to the Department an update to the existing Spill Control Plan. The updated spill control plan shall include the following:

1. A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
2. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
3. A list of all oil and chemicals used, processed, or stored at the facility that may be spilled into state waters.

For the purpose of meeting this requirement, plans and manuals, or portions thereof, required by 33 CFR 154, 40 CFR 109, 40 CFR 110, 40 CFR Part 112, the Federal Oil Pollution Act of 1990, Chapter 173-181, and contingency plans required by Chapter 173-303 WAC may be submitted.

S8. ACUTE TOXICITY

A. Effluent Characterization

The Permittee shall conduct acute toxicity testing on the final effluent to determine the presence and amount of acute (lethal) toxicity. Testing shall begin within 180 days after the combined deep water outfall 100 is placed in service. The final acute toxicity report shall be submitted to Ecology within one year of starting the sampling program. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted every other month for one year. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate

the concentration lethal to 50% of the organisms (LC_{50}). The percent survival in 100% effluent shall also be reported.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA/600/4-90/027F).

2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48 hour static test, method: EPA/600/4-90/027F). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.

B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing one year of effluent characterization, either:

1. The median survival of any species in 100% effluent is below 80%.

2. Any one test of any species exhibits less than 65% survival in 100% effluent.

If an effluent limit for acute toxicity is required by subsection B at the end of one year of effluent characterization, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of one year of effluent characterization, then the Permittee shall complete all applicable requirements in subsections E and F.

The effluent limit for acute toxicity is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

In the event of failure to pass the test described in subsection C. of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection D. are being met to the satisfaction of the Department.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The ACEC must be determined prior to starting the acute toxicity testing.

C. Monitoring for Compliance with an Effluent Limit for Acute Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A on a rotating basis and performed using at a minimum 100% effluent, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation

schedule. The percent survival in 100% effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

D. Response to Noncompliance with an Effluent Limit for Acute Toxicity

If the Permittee violates the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall determine the LC_{50} and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction

Evaluation (TI/RE) plan to the Department. The TI/RE plan submittal shall be within 60 days after the sample date for the fourth additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first three additional compliance monitoring tests failed to meet the acute toxicity limit, then the Permittee shall submit the TI/RE plan within 60 days after the sample date for the first additional monitoring test to violate the acute toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by the Department shall be used, and results submitted to the Department as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on composite samples. Composite samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. All samples must be below 8° C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 4° C in the dark from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S9. CHRONIC TOXICITY

A. Effluent Characterization

The Permittee shall conduct chronic toxicity testing on the final effluent. The three chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization. Testing shall begin within 180 days after the combined deep water outfall has been placed in service. The CCEC shall be determined within 180 day following the completion of Outfall 100.

Effluent testing for chronic toxicity shall be conducted quarterly for one year. The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. The chronic no observed effects concentration (NOEC) will also be determined for comparison to the ACEC. The Permittee shall include the ACEC in the concentration series of all subsequent tests and compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001. Chronic toxicity tests shall be conducted with the following three species and the most recent version of the following protocols:

Saltwater Chronic Toxicity Test Species		Method
Topsmelt	*Atherinops affinis*	EPA/600/R-95/136
Pacific oyster/ Mussel	*Crassostrea gigas/ Mytilus sp.*	EPA/600/R-95/136
Sea urchin/ Sand dollar	*Strongylocentrotus purpuratus/ Dendraster excentricus*	EPA/600/R-95/136

The Pacific oyster and mussel tests shall be run in accordance with EPA/600/R-95/136 and the bivalve development test conditions in the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof. The laboratory shall use whichever one of the two species that will give a valid result in each particular test.

The sea urchin and sand dollar (echinoderm) test shall be run in accordance with EPA/600/R-95/136 and the echinoderm fertilization test conditions in the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof. The laboratory shall use whichever one of the two species that will give a valid result in each particular test.

B. Effluent Limit for Chronic Toxicity

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted under subsection A results in an NOEC less than the ACEC, or if any test shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001). The Permittee shall complete all applicable requirements in subsections C, D, and F upon determining that an effluent limit for chronic toxicity applies to the discharge.

If no test resulted in a NOEC less than the ACEC or if no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).

The CCEC means the maximum concentration of effluent allowable at the boundary of a mixing zone assigned pursuant to WAC 173-201A-100. The CCEC shall be determined prior to starting the chronic toxicity testing.

C. Monitoring for Compliance with an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A above on a rotating basis and performed using at a minimum the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in

response between the control and the CCEC is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

D. Response to Noncompliance with an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall equal the CCEC and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection C. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department. The TI/RE plan submittal shall be within 60 days after the sample date for the third additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first two additional compliance monitoring tests failed to meet the chronic toxicity limit, then the Permittee shall submit the TI/RE plan within 60 days after the sample date for the first additional monitoring test to violate the chronic toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Chronic Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial chronic effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on composite samples. Composite samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. All samples must be below 8° C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 4° C in the dark from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC and the CCEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

S10. SEDIMENT STUDY FOR OUTFALL 100

A. Sediment Sampling and Analysis Plan – Outfall 100

The Permittee shall submit to the Department for review and approval a Sediment Sampling and Analysis Plan for baseline sediment monitoring in the vicinity of the Permittee's replacement outfall 100 within 180 days of the permit effective date.

Discrete sediment samples should be analyzed for all 47 Sediment Management Standard chemicals, dioxin, resin acids, and guaiacols. Biological testing should be performed on all stations with chemical sediment quality standard exceedances. Testing should be conducted on discrete sediment samples.

The Permittee shall submit a Sediment Sampling and Analysis Plan following the guidance provided in the Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan Appendix (Ecology 1995) and current Puget Sound Estuary Program Protocols. The permittee may submit a plan prepared in accordance with the above protocols that has been submitted and approved prior to the permit effective date.

B. Sediment Data Report – Outfall 100

Following Department approval of the Sediment Sampling and Analysis Plan, sediments will be collected and analyzed within one year of the approval of the plan. The Permittee shall submit to the Department a Sediment Data Report containing the results of the sediment sampling and analysis within 60 days of receiving final test results.

The Sediment Data Report shall conform with the approved Sampling and Analysis Plan and the guidance provided in the Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan Appendix (Ecology 1995) and current Puget Sound Estuary Program Protocols. The Data Report shall also include electronic copies of the sediment chemical and biological data reported in the Department's Sediment Quality Information System (SEDQUAL) template format.

Electronic data must be verified by the Permittee to be in a format compatible with SEDQUAL which uses ASCII protocol comma delimited text files prior to delivery to Ecology. Permittee verification shall be conducted by importing the data into the Permittee's SEDQUAL database, correcting errors, and then exporting the corrected templates for delivery to Ecology.

S11. TOTAL CHLORINE FREE (TCF) STUDY

Within 36 months of permit issuance, the Permittee shall submit to the department, a comprehensive analysis of converting to a totally chlorine free (TCF) bleaching process. This analysis shall include complete technology conversion description, itemized costs to convert, detailed market outlook/viability for TCF product. The analysis shall specify the capital cost to convert, and the predicted product sales impacts and long term economic viability, resulting from the conversion.

S12. BEST MANAGEMENT PRACTICES (BMP)

The Permittee shall update their BMP plan for spent pulping liquor, management, spill prevention, and control in accordance with CFR 430.03 if there are any major changes in the pulp mill and follow the plan during the terms of the permit.

S13. EFFLUENT MIXING STUDY

A. Dilution ratio determination

The Permittee shall determine the degree of wastewater and receiving water mixing which occurs within the mixing zone for the new combined outfall replacement (outfall 100) within 180 days of its completed construction. The degree of mixing shall be determined during critical conditions, as defined in WAC 173-201A-020 Definitions - "Critical Condition," or as close to critical conditions as reasonably possible.

The use of mixing models is an acceptable alternative or adjunct to a dye study if the critical ambient conditions necessary for model input are known or will be established with field studies; and if the diffuser is visually inspected for integrity or has been recently tested for performance by the use of tracers. The use of models is also required if critical condition scenarios that need to be examined are quite different from the set of conditions present during the dye study. The resultant dilution ratios for acute and chronic boundaries shall be applied in accordance with directions found in Ecology's *Permit Writer's Manual* (Ecology publication 92-109, most current version) - in particular Chapter VI. A Plan of Study shall be submitted to the Department for review 30 days prior to initiation of the effluent mixing study. Models used for the design of outfall 100 may be upgraded to satisfy this requirement.

C. Reporting Requirements

If the Permittee has information on the background physical conditions or background concentration of chemical substances (for which there are criteria in Chapter 173-201A WAC) in the receiving water, this information shall be submitted to the Department as part of the Effluent Mixing Report.

The results of the mixing study shall be submitted to the Department for approval within 60 days of study completion.

The Permittee shall use some method of fixing and reporting the location of the outfall and mixing zone boundaries (i.e., triangulation off the shore, microwave navigation system, or using Loran or Global Positioning System (GPS) coordinates). The method of fixing station location and the actual station locations shall be identified in the report.

D. Protocols

The Permittee shall determine the dilution ratio using protocols outlined in the following references, approved modifications thereof, or by another method approved by the Department:

-Akar, P.J. and G.H. Jirka, *Cormix2: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Multiport Diffuser Discharges,* USEPA Environmental Research Laboratory, Athens, GA, Draft, July 1990.

-Baumgartner, D.J., W.E. Frick, P.J.W. Roberts, and C.A. Bodeen, *Dilution Models for Effluent Discharges,* USEPA, Pacific Ecosystems Branch, Newport, OR 1993.

-Doneker, R.L. and G.H. Jirka, *Cormix1: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Submerged Single Port Discharges,* USEPA, Environmental Research Laboratory, Athens, GA, EPA/600-3-90/012, 1990.

-Ecology, *Permit Writer's Manual*, Water Quality Program, Department of Ecology, Olympia WA 98504, July 1994, including most current addenda.

-Ecology, *Guidance for Conducting Mixing Zone Analyses*, Permit Writer's Manual, (Appendix 6.1), Water Quality Program, Department of Ecology, Olympia WA 98504, October 1996.

-Kilpatrick, F.A., and E.D. Cobb, Measurement of Discharge Using Tracers, Chapter A16, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics,* USGS, U.S. Department of the Interior, Reston, VA, 1985.

-Wilson, J.F., E.D. Cobb, and F.A. Kilpatrick, Fluorometric Procedures for Dye Tracing, Chapter A12, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics,* USGS, U.S. Department of the Interior, Reston, VA, 1986.

S14. PRIORITY POLLUTANT SCAN

The Permittee shall analyze final mill effluent annually for the priority pollutants identified in Appendix A of this permit. Analysis shall be done in accordance with general QA/QC provisions set forth throughout this permit. The first analysis results shall be reported within 12 months of permit issuance and annually thereafter.

S15 STORMWATER DISCHARGES

The permittee is authorized to discharge treated stormwater from the mill through outfalls 001, 003 and 008 until outfall 100 starts up and from outfall 100 thereafter. The permittee is authorized to discharge stormwater from parking lots and associated areas draining to outfalls 009, 010, and 011 utilizing Best Management Practices (BMPs) for the stormwater runoff from these areas and all other stormwater via outfalls 003 and 008 in emergency situations after outfall 100 is operational.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

A. All permit applications shall be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.

B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Department.

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

> I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.

B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.

C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

1. Violation of any permit term or condition.

2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.

3. A material change in quantity or type of waste disposal.

4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].

5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].

6. Nonpayment of fees assessed pursuant to RCW 90.48.465.

7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:

1. A material change in the condition of the waters of the state.

2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.

3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.

4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.

5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.

6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.

7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7, of this section, and the Department determines that modification or revocation and reissuance is appropriate.

2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

G4. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports whenever a material change to the facility or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least sixty (60) days prior to any proposed changes. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b) (2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G10. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars ($10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars ($10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G16. UPSET

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S5 of this permit.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G17. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G18. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G19. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G20. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G21. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in

quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G22. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by the Department.

G23. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

G24. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify the Department as soon as they know or have reason to believe:

A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. One hundred micrograms per liter (100 μg/l).

2. Two hundred micrograms per liter (200 μg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/l) for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony.

3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).

4. The level established by the Director in accordance with 40 CFR 122.44(f).

B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. Five hundred micrograms per liter (500μg/L).

2. One milligram per liter (1 mg/L) for antimony.

3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g) (7).

4. The level established by the Director in accordance with 40 CFR 122.44(f).

G25. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

APPENDIX A - PRIORITY POLLUTANT LIST

Pollutant & CAS No. ***(if available)***	**Analytical Protocol** as EPA Part 136 methods or Standard Methods	**Detection or Quantitation Level**
Metals, Cyanide & Total Phenols (Part C)		**DL μg/l**
Antimony, Total (7440-36-0)	204.2	3
Arsenic, Total (7440-38-2)	206.2	1
Beryllium, Total (7440-43-9)	210.2	1
Cadmium, Total (7440-43-9)	213.2	0.1
Chromium, Total (7440-47-3)	218.2	1
Copper, Total (7440-50-8)	220.2	1
Lead, Total (7439-92-1)	239.2	1
Mercury, Total (7439-97-6) *	245.1 or 245.2	0.2
Nickel, Total (7440-02-0)	249.2	1
Selenium, Total (7782-49-2)	270.2	2
Silver, Total (7440-22-4)	272.2	0.2
Thallium, Total (7440-28-0)	279.2	1
Zinc, Total (7440-66-6)	289.2	0.05
Cyanide, Total ( )	335.2	20
Dioxin		**QL μg/l**
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (1764-01-6) *	1613	0.00001
Volatile Compounds		**QL μg/l**
Acrolein (107-02-8)	624	50
Acrylonitrile (107-13-1)	624	50

Pollutant & CAS No. *(if available)*	**Analytical Protocol** as EPA Part 136 methods or Standard Methods	**Detection or Quantitation Level**
Benzene (71-43-2)	624	10
Bis (*chloromethyl)* Ether (542-88-1)	624	10
Bromoform (75-25-2)	624	10
Carbon Tetrachloride (108-90-7)	624	10
Chlorobenzene (108-90-7)	624	50
Chlorodibromomethane (124-48-1)	624	10
Chloroethane (75-00-3)	624	10
Chloroethylvinyl Ether (110-75-8)	624	50
Chloroform (67-66-3)	624	10
Dichlorobromomethane (75-27-4)	624	10
Dichlorodifluromethane (75-71-8)	624	10
1,1-Dichloroethane (75-34-3)	624	10
1,2-Dichloroethane (107-06-2)	624	10
1,1-Dichloroethylene (75-35-4)	624	10
1,2-Dichloropropane (78-87-5)	624	10
1,3-Dichloropropene (542-75-6)	624	10
Ethylbenzene (100-41-4)	624	10
Methyl Bromide (74-83-9)	624	50
Methyl Chloride (74-87-3)	624	50
Methylene Chloride (75-09-2)	624	20
1,1,2,2-Tetrachloroethane (79-34-5)	624	10
Tetrachloroethylene (127-18-4)	624	10
Toulene (108-88-3)	624	10
1,2-Trans-Dichloroethylene (156-60-5)	624	10
1,1,1-Trichloroethane (71-55-6)	624	10
1,1,2-Trichloroethane (79-00-5)	624	10
Trichloroethylene (79-01-6)	624	10
Trichlorofluromethane (75-69-4)	624	10
Vinyl Chloride (75-01-4)	624	10
Acid Compounds		**QL µg/l**
2-Chlorophenol (95-57-8)	625	10
2,4-Dichlorophenol (120-83-2).	625	10
2,4-Dimethylphenol (105-67-9)	625	10
4,6-Dinitro-O-Cresol (534-52-1)	625	50
2,4 Dinitrophenol (51-28-5)	625	50
2-Nitrophenol (88-75-5)	625	20
4-Nitrophenol (100-02-7)	625	50
P-Chloro-M-Cresol (59-50-7)	625	10
Pentachlorophenol (87-86-5)	625	50
Phenol (108-95-2)	625	10
2,4,6-Trichlorophenol (88-06-2)	625	10
Base/Neutral Compounds		**QL µg/l**
Acenaphthene (83-32-9)	625	10

Pollutant & CAS No. *(if available)*	**Analytical Protocol** as EPA Part 136 methods or Standard Methods	**Detection or Quantitation Level**
Acenaphtylene (208-96-8)	625	10
Anthracene (120-12-7)	625	10
Benzidine (92-87-5)	625	50
Benzo (*a*) Anthracene (56-55-3)	625	10
Benzo (*a*) Pyrene (50-32-8) *****	625	10
3,4-Benzofluoranthene (205-99-2)	625	10
Benzo (*ghi*) Perylene (191-24-2)	625	20
Benzo *(k*) Fluoranthene (207-08-9)	625	10
Bis (*2-Chloroethoxy)* Methane (111-81-1)	625	10
Bis (*2-Chloroethyl*) Ether (111-44-4)	625	10
Bis (*2-Chloroisopropyl*) Ether (102-60-1)	625	10
Bis (*2-Ethylhexyl*) Phthalate (117-81-7)	625	10
4-Bromophenyl Phenyl Ether (101-55-3)	625	10
Butyl Benzyl Phthalate (85-68-7)	625	10
2-Chloronaphthalene (91-58-7)	625	10
4-Chlorophenyl Phenyl Ether (7005-72-3)	625	10
Chrysene (218-01-8)	625	10
Dibenzo (*a-h*) Anthracene (53-70-3)	625	20
1,2-Dichlorobenzene (95-50-1)	625	10
1,3-Dichlorobenzene (541-73-1)	625	10
1,4-Dichlorobenzene (106-46-7)	625	10
3,3'-Dichlorobenzidine (91-84-1)	625	50
Diethyl Phthalate (84-66-2)	625	10
Dimethyl Phthalate (131-11-3)	625	10
Di-N-Butyl Phthalate (84-74-2)	625	10
2,4-Dinitrotoluene (121-14-2)	625	10
2,6-Dinitrotoluene (606-20-2)	625	10
Di-n-octyl Phthalate (117-84-0)	625	10
1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	625	20
Fluoranthene (206-44-0)	625	10
Fluorene (86-73-7)	625	10
Hexachlorobenzene (118-74-1) *****	625	10
Hexachlorobutadiene (87-68-3)	625	10
Hexachlorocyclopentadiene (77-47-4)	625	10
Hexachloroethane (67-72-1)	625	20
Indeno (*1,2,3-cd*) Pyrene (193-39-5)	625	20
Isophorone (78-59-1)	625	10
Naphthalene (91-20-3)	625	10
Nitrobenzene (98-95-3)	625	10
N-Nitrosodimethylamine (62-75-9)	625	50
N-Nitrosodi-N-Propylamine (621-64-7)	625	20
N-Nitrosodiphenylamine (86-30-6)	625	20
Perylene (198-55-0) *****	625	10

Pollutant & CAS No. *(if available)*	**Analytical Protocol** as EPA Part 136 methods or Standard Methods	**Detection or Quantitation Level**
Phenanthrene (85-01-8) *	625	10
Pyrene (129-00-0)	625	10
1,2,4-Trichlorobenzene (120-82-1)	625	10
GC/MS Fraction – Pesticides and PCBs		**QL µg/l**
Aldrin (309-00-2) *	608	0.05
a-BHC (319-84-6)	608	0.05
β-BHC (319-85-7)	608	0.05
ϒ-BHC (58-89-9)	608	0.05
δ-BHC (319-86-8)	608	0.05
Chlordane (57-74-9) *	608	0.2
4,4'-DDT (50-29-3) *	608	0.1
4,4'-DDE (72-55-9) *	608	0.1
4,4' DDD (72-54-8) *	608	0.1
Dieldrin (60-57-1) *	608	0.1
a-Endosulfan (115-29-7)	608	0.1
β-Endosulfan (115-29-7)	608	0.1
Endosulfan Sulfate (1031-07-8)	608	0.1
Endrin (72-20-8) *	608	0.1
Endrin Aldehyde (7421-83-4)	608	0.1
Heptachlor (76-44-8) *	608	0.05
Heptachlor Epoxide (1024-57-3)	608	0.05
PCB-1242 (53469-21-8) *	608	1.0
PCB-1254 (11097-69-1) *	608	1.0
PCB-1221 (11104-28-2) *	608	1.0
PCB-1232 (11141-16-5) *	608	1.0
PCB-1248 (12672-29-6) *	608	1.0
PCB-1260 (11096-82-5) *	608	1.0
PCB-1016 (12674-11-2) *	608	1.0
Toxaphene (8001-35-2) *	608	5.0

*** Persistent, Bioaccumulative and Toxic (PBT) Chemicals of Concern**

This table is a list of all priority pollutants and also includes PBT chemicals of concern indicated with an asterisk. It includes PCBs and pesticides that are not required to be tested for in the treatment efficiency study analysis unless they are used on site.